



www.estesrockets.com

ESTES-COX CORP.

1295 H Street  
Penrose, CO 81240

PRINTED IN CHINA

# DRAGONITE™

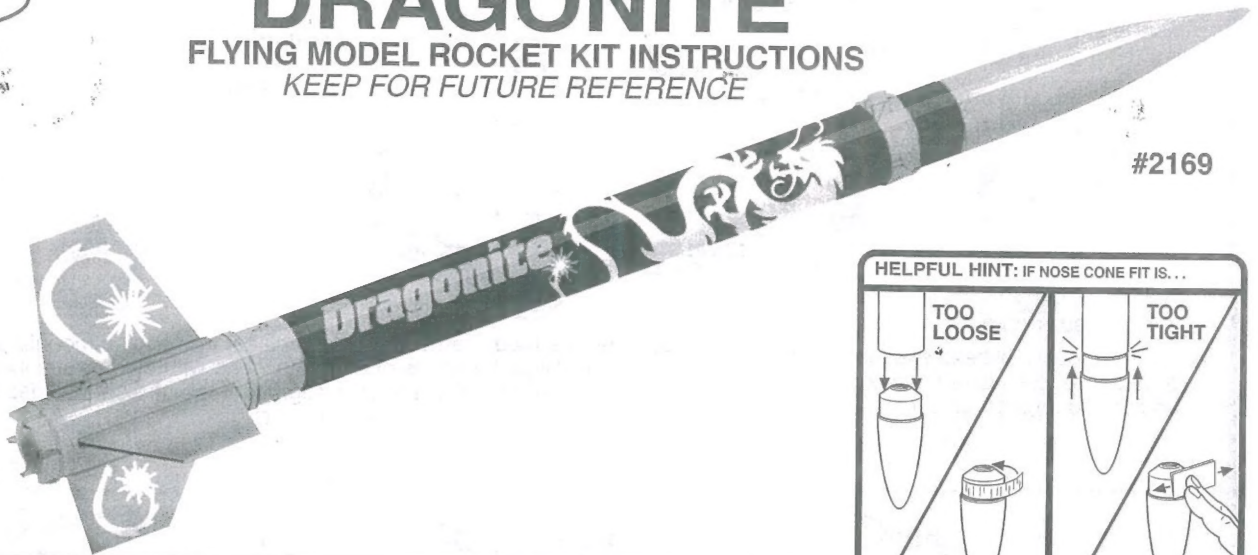
## FLYING MODEL ROCKET KIT INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

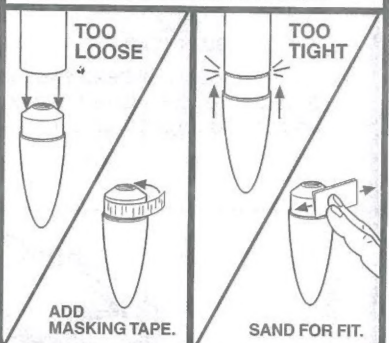
#2169

### ASSEMBLY TIP:

Read all instructions before beginning work on your model. Make sure you have all parts and supplies.



HELPFUL HINT: IF NOSE CONE FIT IS...



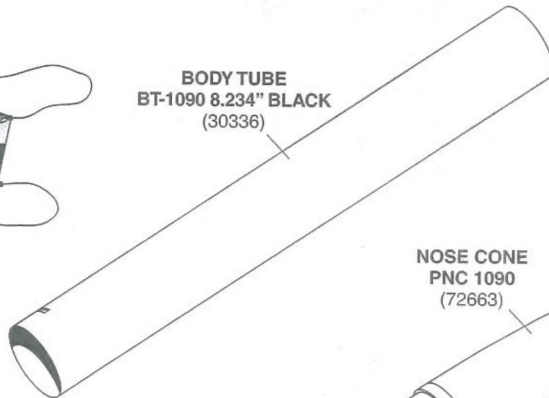
### PARTS

Locate the parts shown below and lay them out on the table in front of you. DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.

12" PARACHUTE, RTF  
(35801)



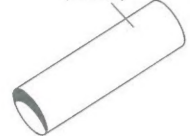
BODY TUBE  
BT-1090 8.234" BLACK  
(30336)



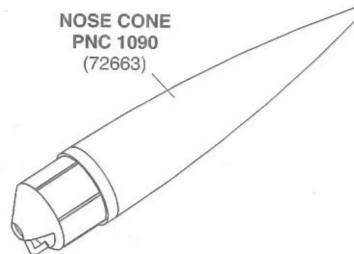
SHOCK CORD RING  
WITH LAUNCH LUG



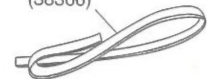
ENGINE MOUNT TUBE  
BT-20 2.5" WHITE  
(30335)



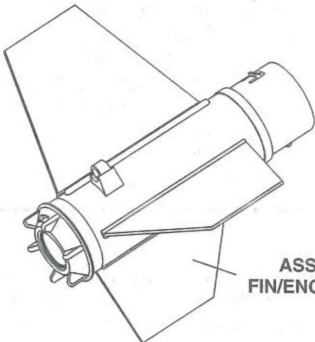
NOSE CONE  
PNC 1090  
(72663)



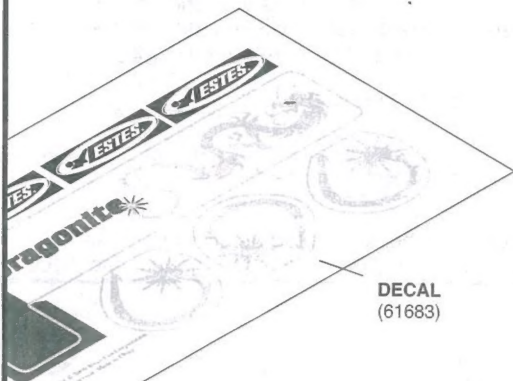
RUBBER SHOCK  
CORD 1/8" x 18"  
(38366)



ASSEMBLED  
FIN/ENGINE MOUNT



DECAL  
(61683)



**SUPPLIES** In addition to the parts included in the kit you will also need:



SCISSORS

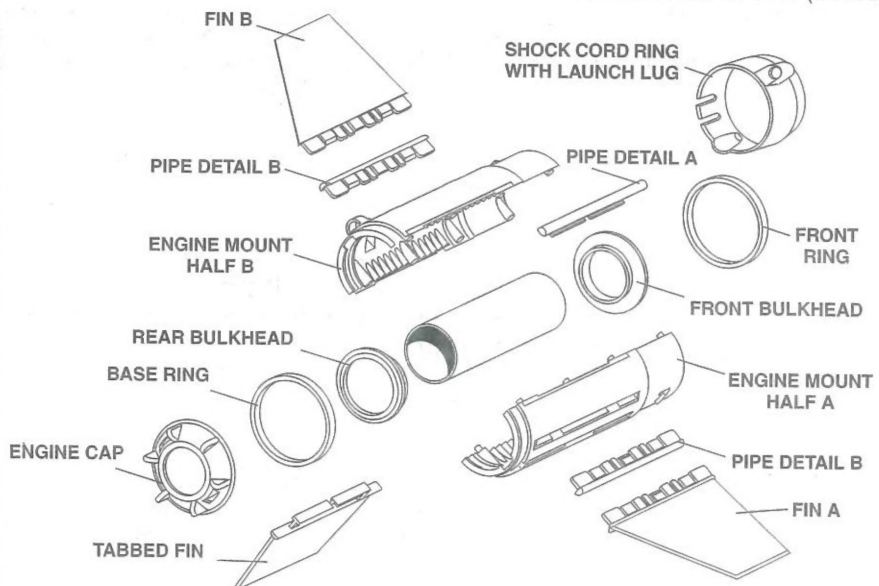


FINE  
SANDPAPER  
(400-600 GRIT)

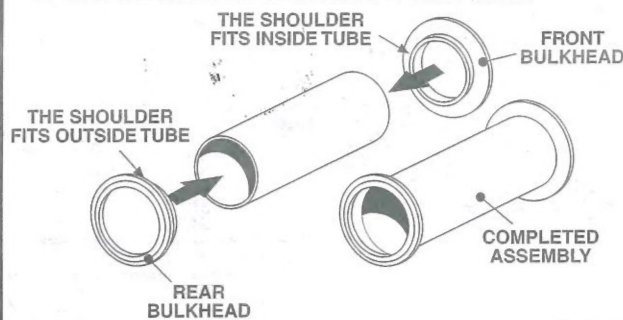


MASKING  
TAPE

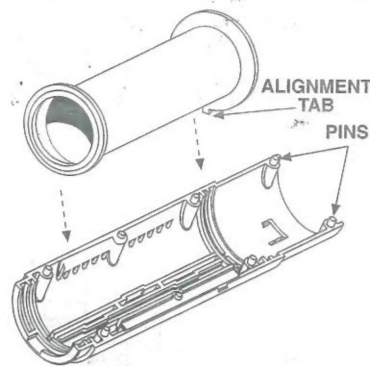
PLASTIC PARTS SET (61762)  
& PLASTIC FIN SET (61763)



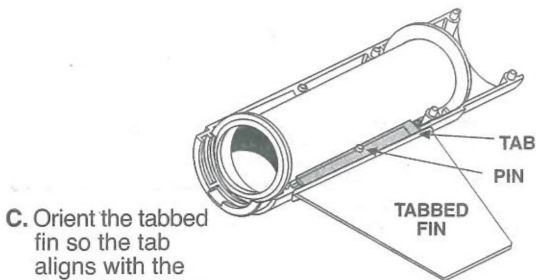
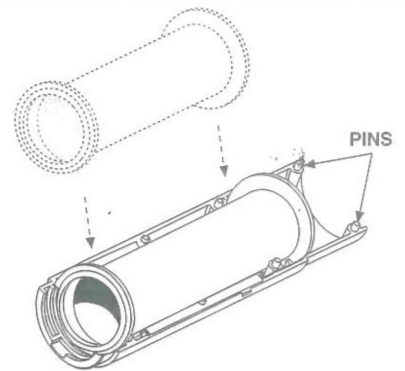
## 1. ASSEMBLE ENGINE MOUNT



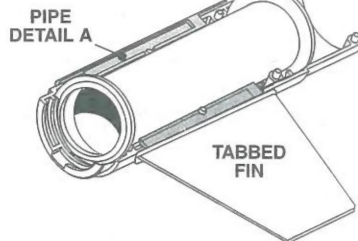
A. Insert the front bulkhead and rear bulkhead onto opposite ends of the white BT-20 engine mount tube as shown.



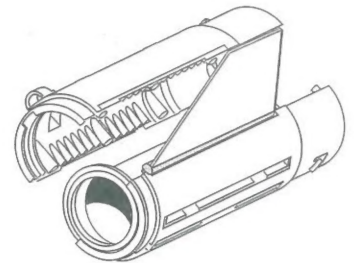
B. Insert the tube (with bulkheads in place) into engine mount half A (with pins) as shown. Align the ridges of each bulkhead with the corresponding grooves in the engine mount half. Make sure alignment tab on front bulkhead aligns with notch.



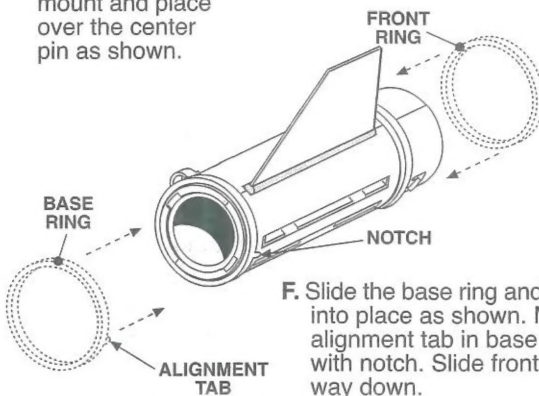
C. Orient the tabbed fin so the tab aligns with the slot in the engine mount and place over the center pin as shown.



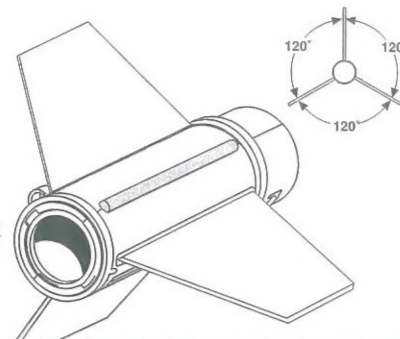
D. Orient and place pipe detail A over the center pin on the opposite side as shown.



E. Carefully align pins of engine mount half A with holes in engine mount half B and press into place.



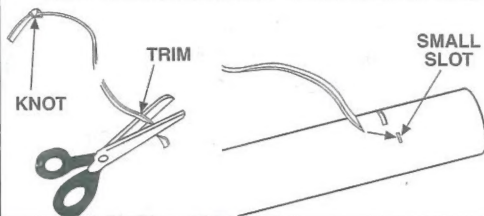
F. Slide the base ring and the front ring into place as shown. Make sure alignment tab in base ring aligns with notch. Slide front ring all the way down.



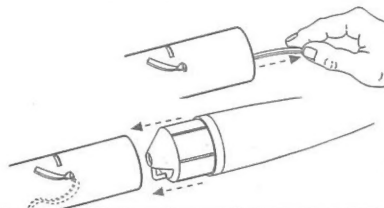
G. "Snap" the other fins and pipe details into place where shown. Orient fin A so the "A" marked on the fin aligns with the "A" marked on the engine mount. Orient fin B with the "B" markings aligned. The fins should be spaced 120° apart as shown.

## 2. INSTALL SHOCK CORD AND LUG

A. Tie a knot in one end of the shock cord. Trim the opposite end to form an angle as shown. Insert the trimmed end of the shock cord into the smaller slot in the forward end of the body tube from the outside of the tube as shown.



B. Pull the cord out the front end of the tube until the knot is snug against the outside of the tube. Then place the shock cord and the nose cone into the forward end of the tube.

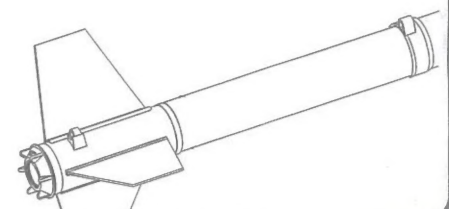
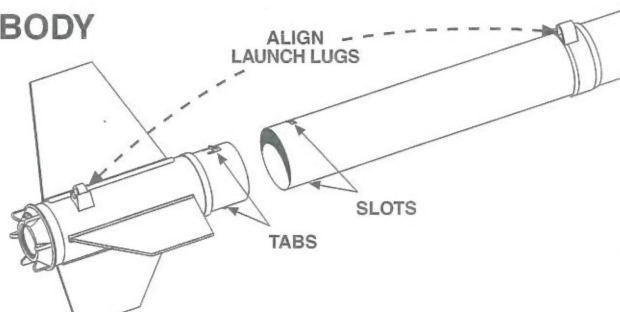


C. Orienting the shock cord ring with the hood toward the rear, slide it over the nose cone and down the body tube so that the hood is over the knot in the shock cord. Twist the ring as needed so that it 'snaps' into the larger slot.

D. Orient the shock cord lug as shown and slide it down the end of the tube until it "snaps" into place.

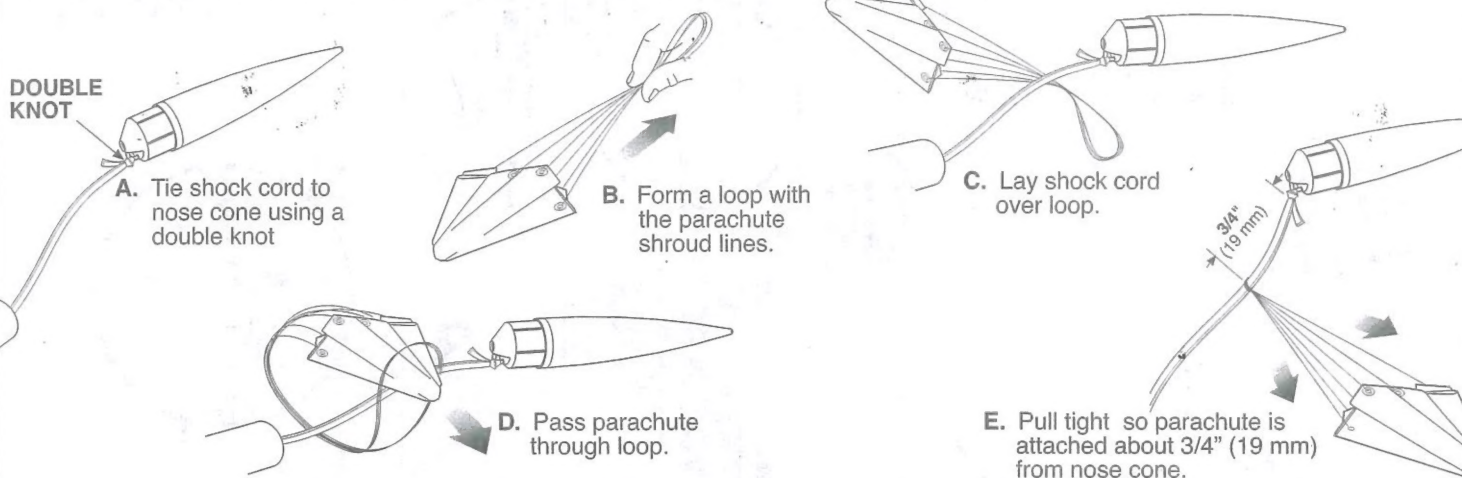
## 3. ASSEMBLE ROCKET BODY

A. Holding the engine mount assembly so that the launch lug is aligned with the launch lug on the shock cord ring, lower the body tube over the shoulder of the engine mount assembly. Twist the body tube as needed to 'snap' the two slots in the tube over the two tabs on the engine mount assembly.



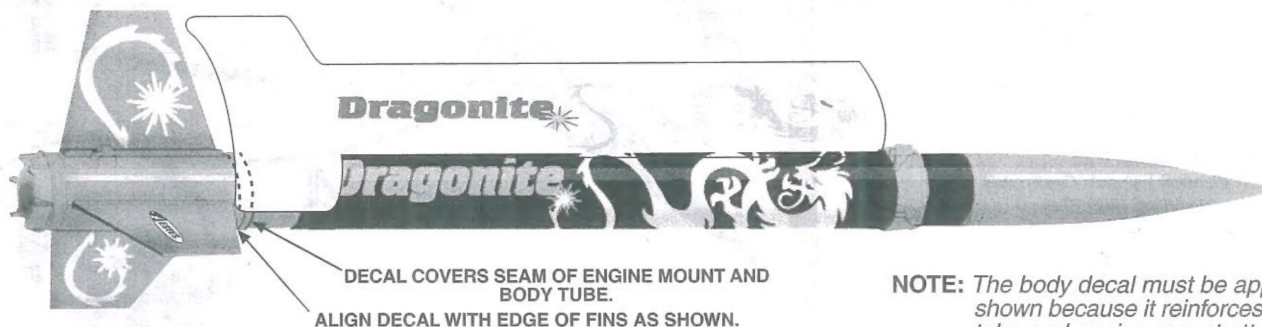


## 4. ATTACH PARACHUTE & SHOCK CORD



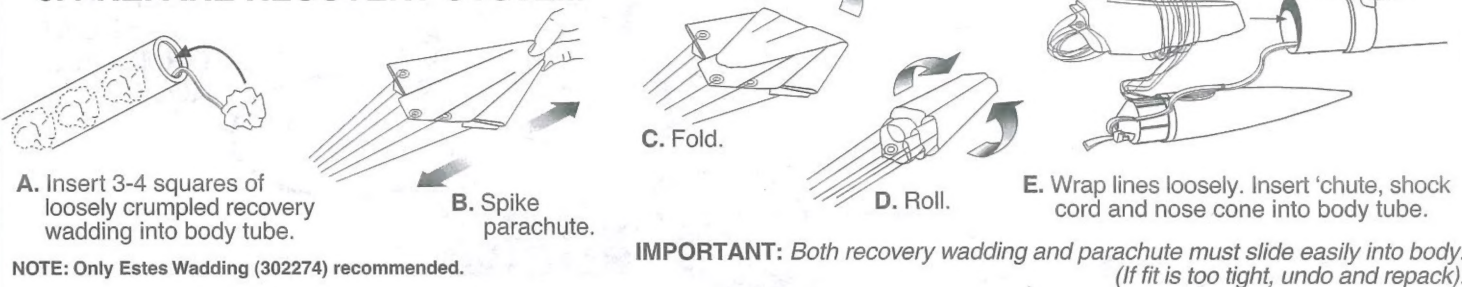
## 5. APPLY DECALS

**A.** Peel decals from backing sheet and apply where shown. Rub down to remove bubbles.



**NOTE:** The body decal must be applied as shown because it reinforces the body tube and engine mount attachment.

## 6. PREPARE RECOVERY SYSTEM

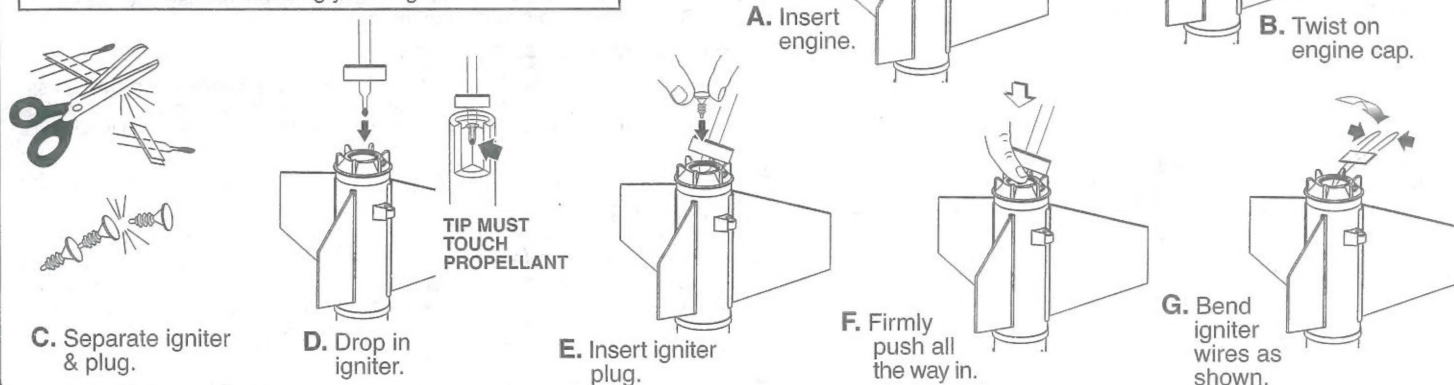


**NOTE:** Only Estes Wadding (302274) recommended.

## 7. PREPARE ENGINE

### ⚠ WARNING: FLAMMABLE

To avoid serious injury, read instructions & NAR Safety Code included with engines before proceeding.  
**PREPARE YOUR ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH!**  
 If you do not use your prepared engine, remove the igniter before storing your engine.

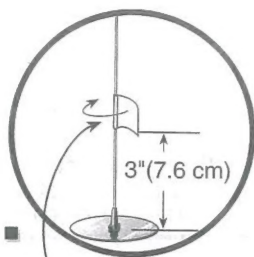


## COUNTDOWN AND LAUNCH



**KEY ALWAYS OUT UNTIL FINAL COUNTDOWN!**

**1...**

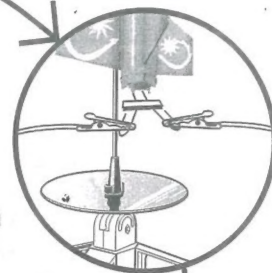


Masking Tape

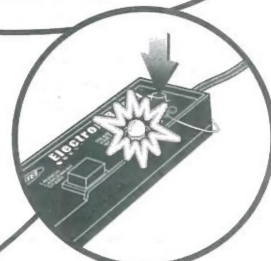
**2...**



**3...**



**4...**



**INSERT KEY. PUSH DOWN FIRMLY AND HOLD.**

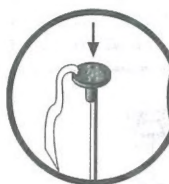
**5...**



**4... 3... 2... 1...**

**WHILE HOLDING KEY DOWN FIRMLY, PRESS LAUNCH BUTTON UNTIL LIFT-OFF!**

**LAUNCH BUTTON**



### ESTES LAUNCH SUPPLIES

(Sold Separately)

- Porta Pad® II Launch Pad
- Electron Beam® Launch Controller
- Recovery Wadding (302274)
- Igniters (with engines)
- Igniter Plugs (with engines)
- Recommended Estes Engines: A8-3, B4-4, B6-4, C6-5, C6-7

## PRECAUTIONS



**NAR Safety Code**



**NO DRY GRASS OR WEEDS**



### PRE-LAUNCH CHECK

For safety, never launch a damaged rocket. Check the rocket's body, nose cone and fins. Also, check the engine mount, recovery system and launch lugs (2). Repair any damage before launching the rocket.

### FLYING YOUR ROCKET

Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility.

Always follow the enclosed National Association of Rocketry (NAR) SAFETY CODE.

### MISFIRES

TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the igniter clips and remove the engine. Take the plug and igniter out of the engine. If the igniter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new igniter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.